



Monitoring and Evaluation of NAP Brazil's experience

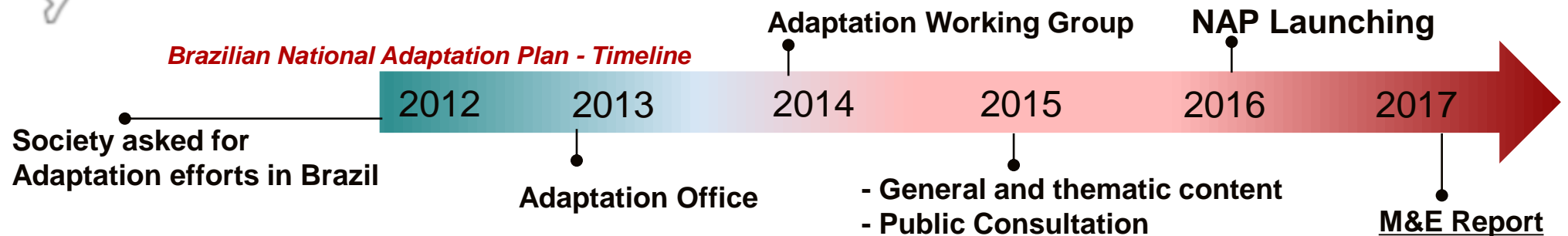
Dr. Pedro Camarinha

UNFCCC Framework



HOW TO START THE NAP?

- What is a National Adaptation Plan?
- What is Vulnerability to Climate Change?
- How to assess impacts and vulnerability?
- How to define and prioritize adaptation measures?
- How to finance adaptation measures?



What was the strategy?



LACK OF SPECIFIC INFORMATION REGARDING CLIMATE RISK, IMPACTS AND VULNERABILITIES RELATED TO CLIMATE CHANGE

MORE DIFFICULTIES IN ESTABLISHING SPECIFIC GOALS AND GUIDELINES

MORE DIFFICULTIES IN OBTAINING FINANCIAL RESOURCES

EXPAND THE KNOWLEDGE REGARDING SECTORAL **IMPACTS AND VULNERABILITIES**, CONSIDERING THE CC

STRENGTHENING RELATIONS WITH OTHER AGENDAS AND FRAMEWORKS

MORE DIFFICULTIES TO CONVINCE GOVERNMENT BODIES TO COMMIT THEMSELVES TO GOALS

FEDERAL GOVERNMENT (MINISTRY OF ENVIRONMENT)

IMPLEMENTATION OF "NO-REGRETS" ADAPTATION MEASURES AND EVALUATE THEIR EFFECTIVENESS

1

2

3



NAP – Specifics Objectives

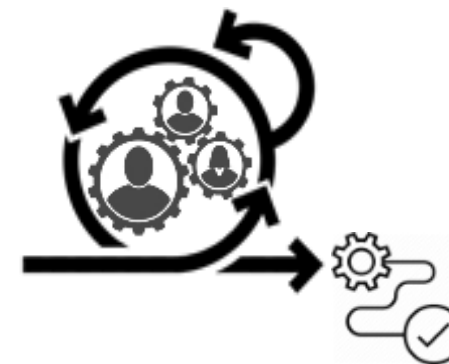


1 Promotion and dissemination of scientific and traditional knowledge.



(Adaptation Mainstream)

2 Coordination between governamental institutions and its different federatives spheres and other stakeholders.



3 Provide adaptation measures and also finance opportunities.



The NAP: Sectors, Goals and Guidelines

13 Ministries and 18 Institutions were involved



Agriculture



Infra-structure



Industry and Mining



Disaster Risk
Management
and Reduction



Cities and Urban
Development



Water Resources



Biodiversity
and Ecosystems



Coastal Zones



Health



Vulnerable
Communities



Food Security

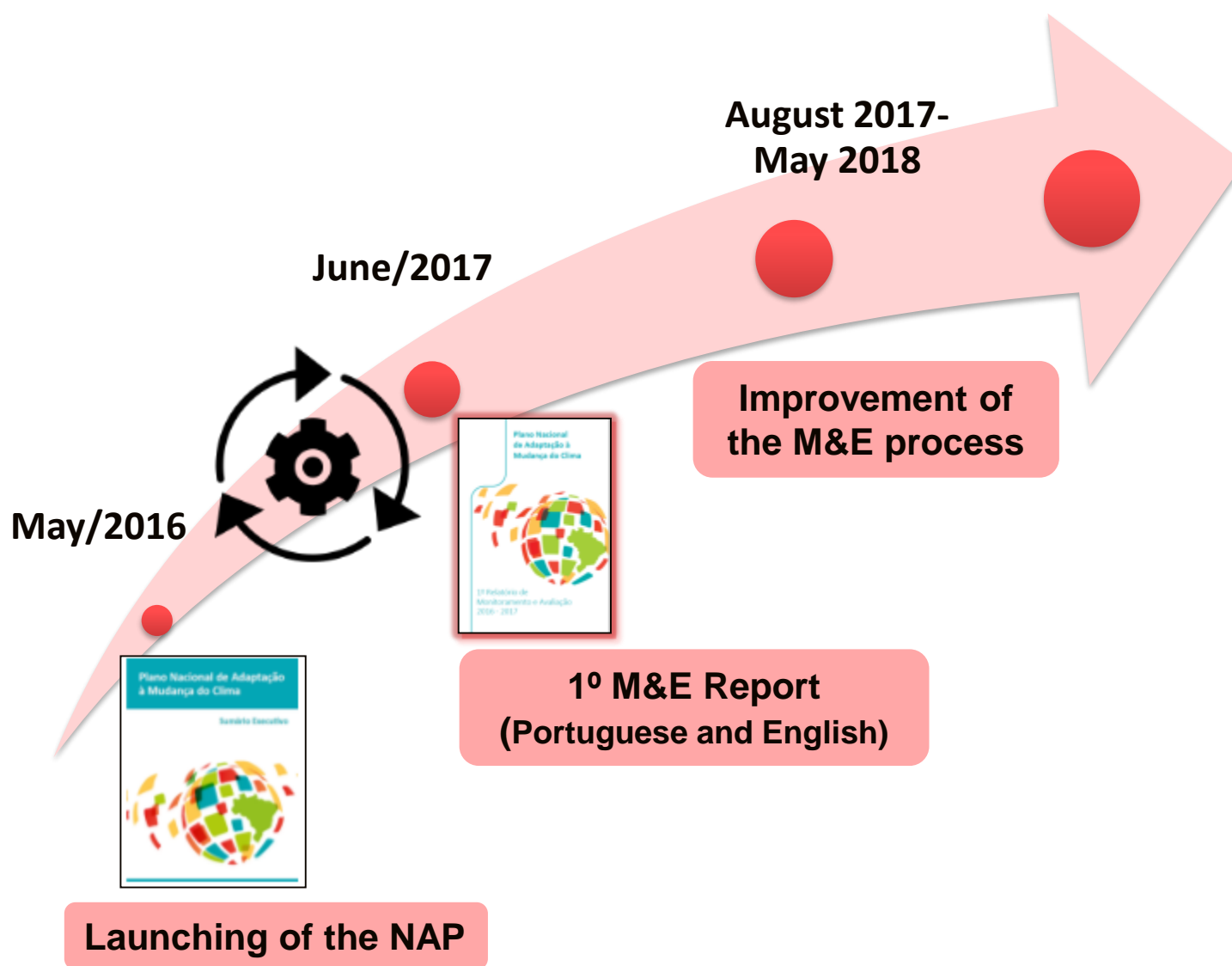
141 GUIDELINES



GENERAL OBJETIVE

Management and reduction of the climate risk in the country, reduce lost and seize the opportunities.

WHAT ARE WE DOING?



Launching of the NAP

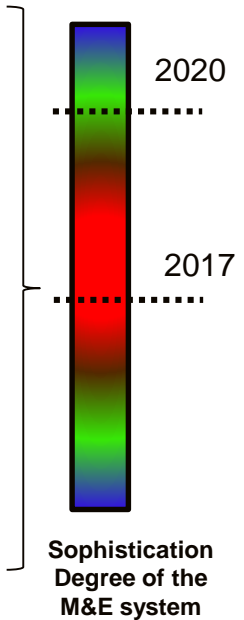
1º M&E Report
(Portuguese and English)

Improvement of
the M&E process

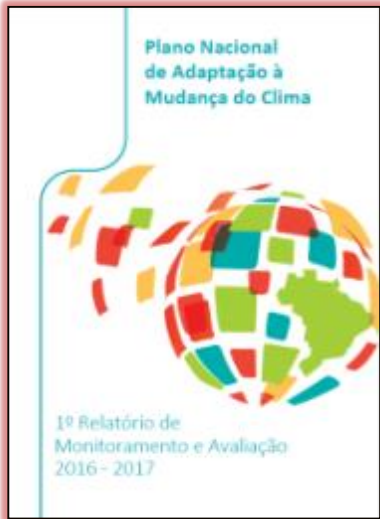
Publication of
the Second
M&E 'Report

Objectives of the M&E system

- Monitor the **integration of adaptation into planning**
- Assessing **progress toward adaptation at national level**
- Monitor the **achievement of the proposed goals**;
- **Monitor the sectorial guidelines** and the adaptation actions of local governments, the private sector and society;
- **Promote feedback to improve the policy and its management**;
- **Promote extensive information** on adaptation actions.



First M&E Report – Main Characteristics



Coordination: Ministry of Environment

Process Monitoring:

- Evaluation of the goals implementation
- Identification of actions implemented by government partners in the framework of the NAP guidelines .
- Identification of synergies with other national policies and international frameworks (Ex.: Sustainable Development Goals, Sendai Framework)
- Collection testing of info on adaptation carried out by the private sector

Information collection cards were forwarded to each 13 Ministries to obtain the following information:

- **Which initiatives/actions have been implemented?**
- **Has it started, not yet or finished?**
- **To which guidelines are those actions related to?**
- **Which institution/Ministry was responsible for it?**
- **Is the action related to SDGs? Which one?**
- **Is there a link to other International Framework or Nacional Policy?**

**FEDERAL BODIES AND
PRIVATE SECTOR**



First M&E Report

Information Collection Cards

Estratégia	
Instituição Responsável:	
Instituições Colaboradoras:	
Técnico Responsável:	
e-mail:	
Telefone de contato:	

CONTEXTO:
(Breve relato das principais ocorrências do período – máximo 2 parágrafos)

II - Resumo dos aspectos quantitativos do Monitoramento & Avaliação

1. Metas ¹

1.1 Nº de metas previstas	
1.2 Nº de metas implementadas	
1.3 Nº de metas com implementação iniciada	

2. Diretrizes

2.1 Nº de diretrizes previstas	
2.2 Nº de diretrizes implementadas	
2.3 Nº de diretrizes com implementação iniciada	

Diretriz	Objetivo do PNA Vinculado	Iniciativas/Ações realizadas	Instituição implementadora	Objetivo do ODS Vinculado	Outros Protocolos Internacionais ou Políticas Nacionais vinculados	Situação	Comentários
1. Promover a articulação federativa entre as três esferas de governo visando à atuação cooperativa na redução de vulnerabilidade à	Obj 1: Produção e Gestão do Conhecimento	Ação 1 - Descrição de ações/iniciativas que contribuem para o seguimento da diretriz	Departamento/Secretaria /Órgão responsável pela implementação da ação.	Identificar dentro do conjunto dos Objetivos de Desenvolvimento Sustentável a qual a ação/iniciativa se vincula. Caso não haja, utilizar N/A.	Caso haja, identificar a vinculação da ação/ iniciativa com outro Protocolo Internacional (Nagoya, Sendai, etc)	Informar o estágio da diretriz: <input type="checkbox"/> com alguma ação iniciada/ <input type="checkbox"/> Sem ação realizada	
Monitoramento Qualitativo das Metas							
Metas	Objetivo do PNA Vinculado	Iniciativas/Ações realizadas	Instituição implementadora	Objetivo do ODS Vinculado	Outros Protocolos Internacionais ou Políticas Nacionais vinculados	Situação	Comentários
1. Estratégia de medidas de Adaptação baseada em Ecossistemas em áreas de risco a eventos extremos e outros impactos da mudança do clima elaborada.	Obj 1: Produção e Gestão do Conhecimento Obj 2: Coordenação e cooperação institucional Obj 3: Medidas de Adaptação e redução do risco climático	Iniciativa/Ação 1 – que contribui para a implementação da meta.	Departamento/Secretaria /Órgão responsável pelo cumprimento da etapa.	Identificar dentro do conjunto dos Objetivos de Desenvolvimento Sustentável a qual a ação/iniciativa se vincula. Caso não haja, utilizar N/A.	Caso haja, identificar a vinculação da ação/iniciativa com outro Protocolo Internacional (Nagoya, Sendai, etc) ou Política Nacional	Informar o estágio de execução da meta: <input type="checkbox"/> Iniciada <input type="checkbox"/> Não Iniciada <input type="checkbox"/> Finalizada	
		Iniciativa/Ação 1 – que contribui para a implementação da meta.				Identificar dentro do conjunto dos Objetivos de Desenvolvimento Sustentável a qual a ação/iniciativa se vincula. Caso não haja, utilizar N/A.	Informar o estágio de execução da meta: <input type="checkbox"/> Iniciada <input type="checkbox"/> Não Iniciada <input type="checkbox"/> Finalizada

First M&E Report – Results



249 actions

The actions were related to 22 of the 23 goals (96%)



Technical group was created to discuss adaptation in the PNGATI (Nacional *Policy on Environmental and Territorial Management in indigenous lands*)

54%
of the actions were related to Objective 2

Adaptation Mainstreaming

Only one goal didn't have actions related to it

72%
of the actions were related to Objective 3

Adaptation measures and Climate risk Reduction

76%
of the actions were related to Objective 1

Knowledge Production and Management



Água Doce Program



Water desanilization for fish and food production

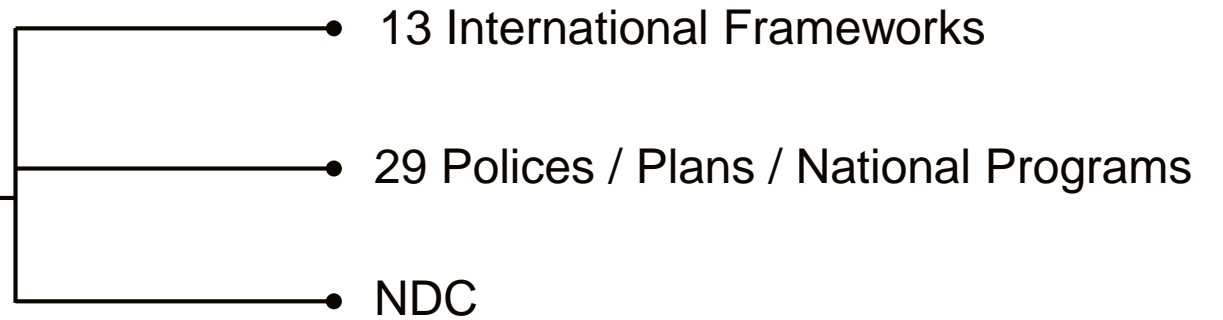




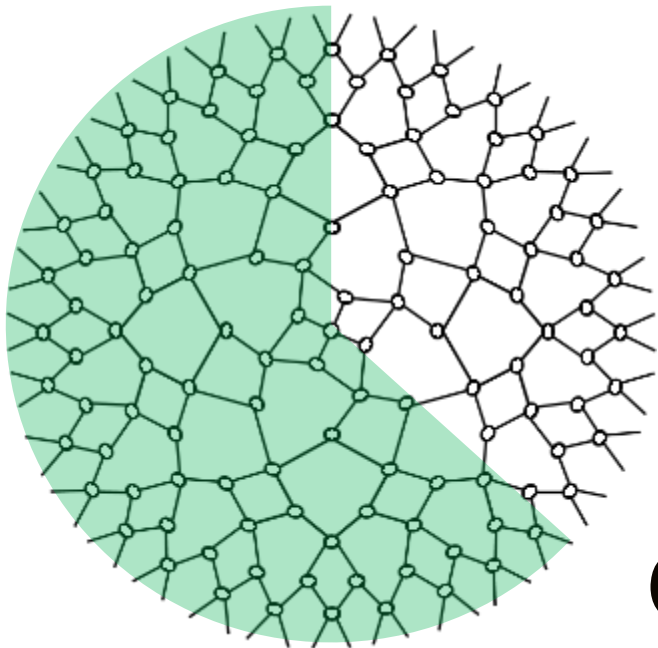
First M&E Report – Results



249 actions



141 GUIDELINES

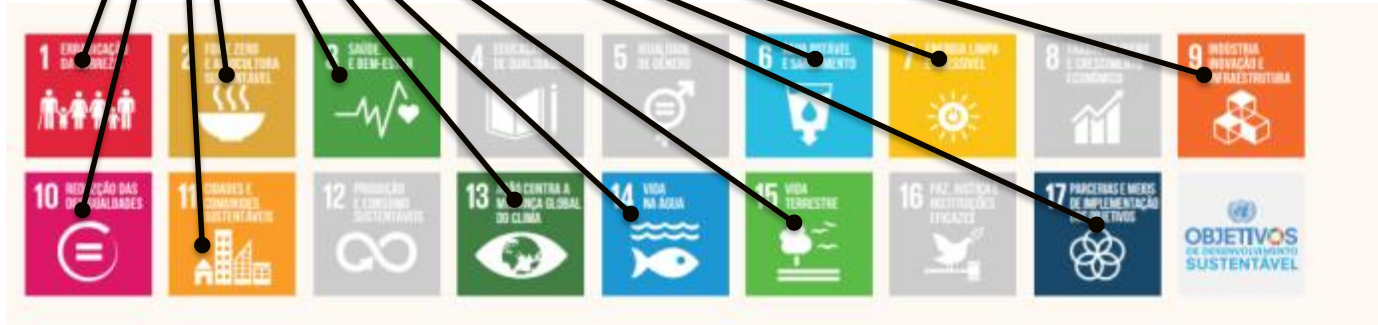


67%

The actions were related to 95 of the 141 guidelines

First M&E Report – Results

249 actions



Contribution to meet 45 of the 169 proposed targets by UNNFCDC.

Contribution to achieve 12 of the 17 SDGs

Example:

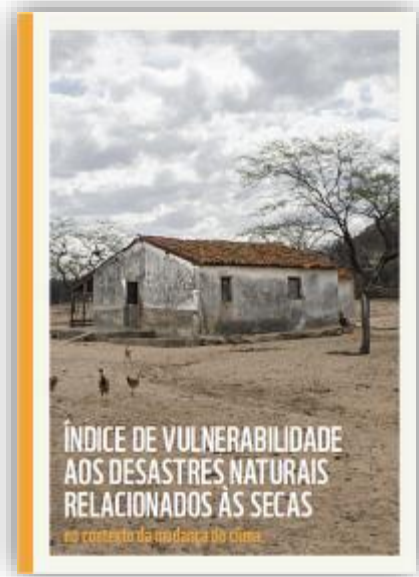
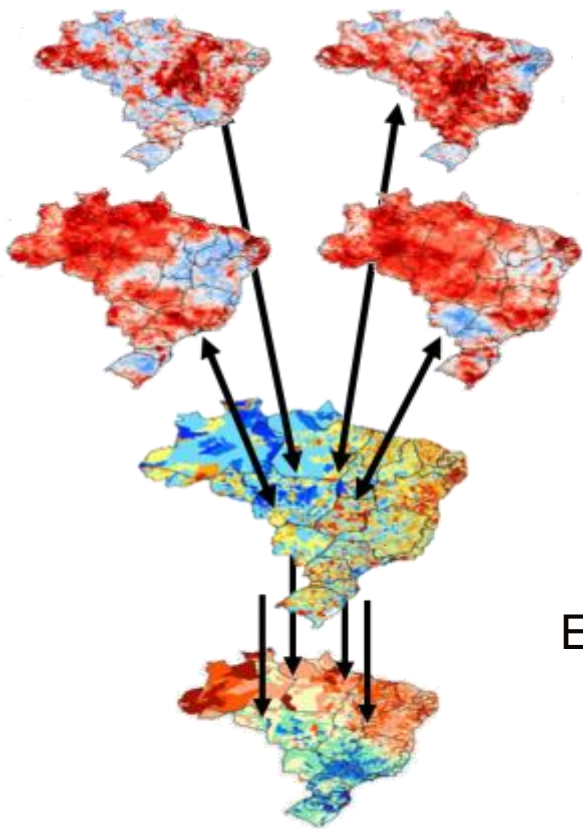
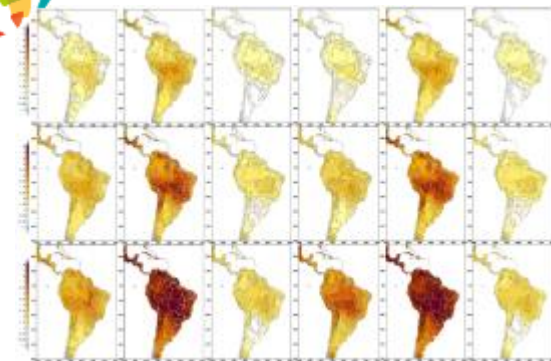
Transposition of the San Francisco river finished in 2017. It brought fresh water to 12 million people in the semiarid region located in the northeast of Brazil



Given those results, what are we doing to achieve better results on adaptation, sustainable development and DRR agendas?

Examples of Adaptation Actions, DRR and SDG

1) Promotion and dissemination of scientific and traditional knowledge



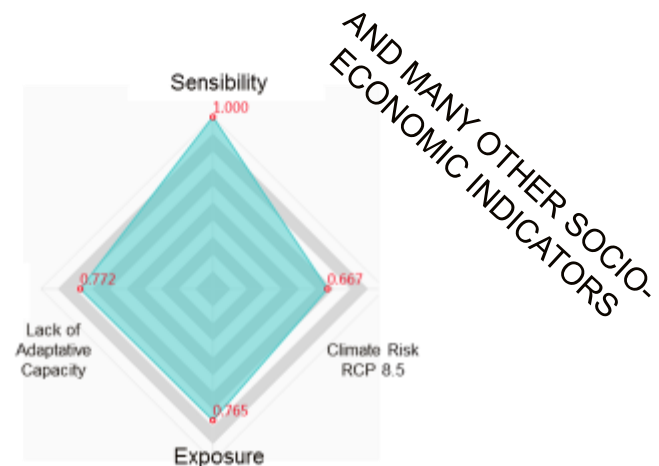
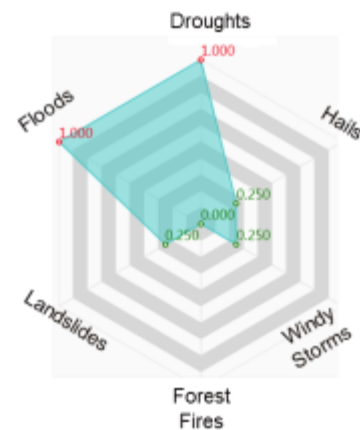
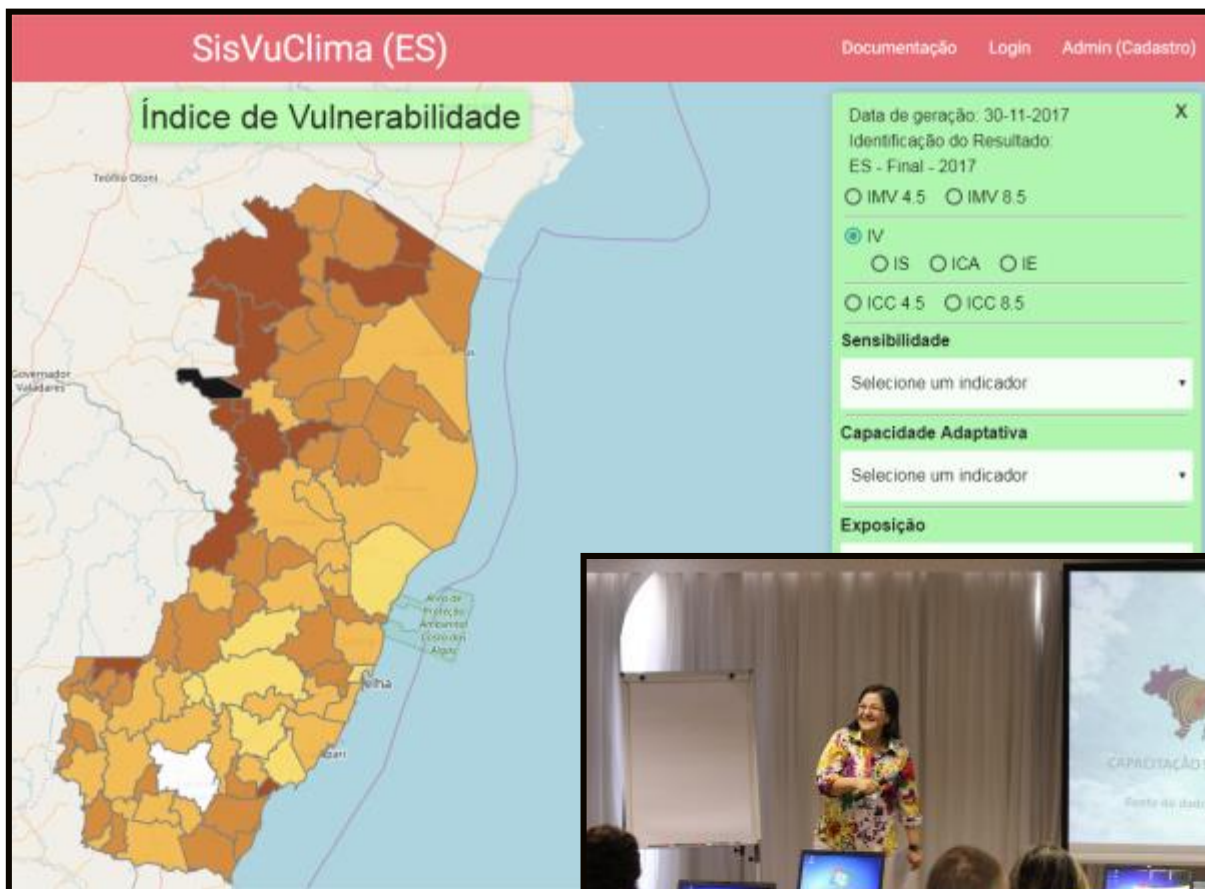
Vulnerability index to evaluate impacts of droughts, considering the climate change

Environmental, socioeconomic, demographic, water use and climate variables (2 global models + 2 RCP)



Examples of Adaptation Actions, DRR and SDG

SISVUCLIMA: SYSTEM OF CLIMATE VULNERABILITY

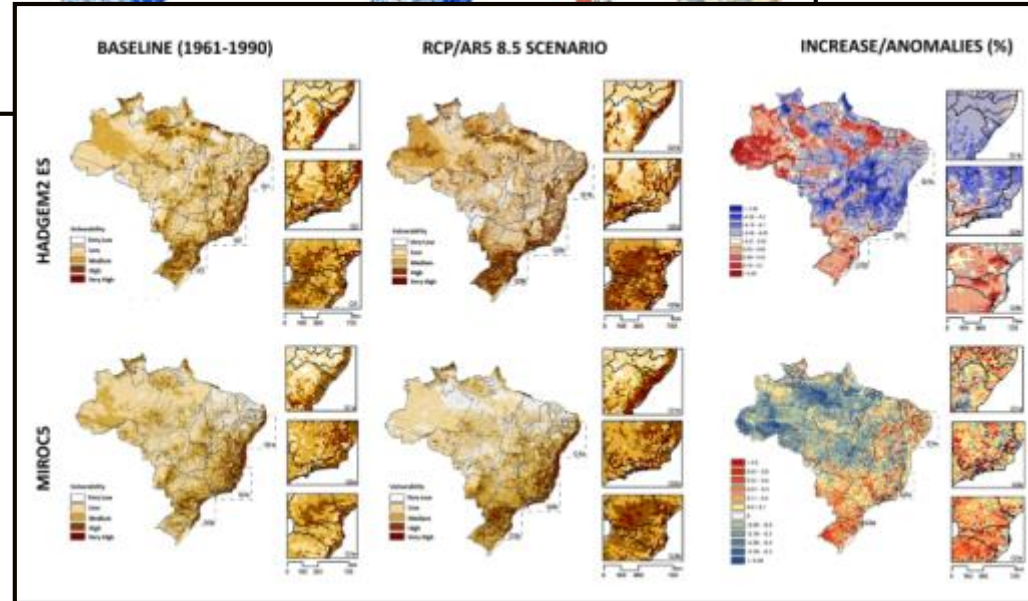
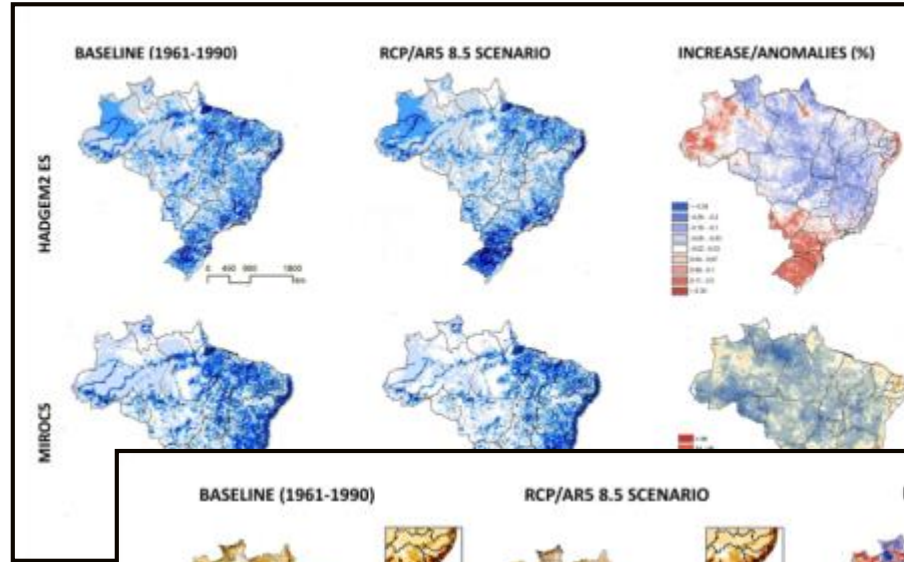
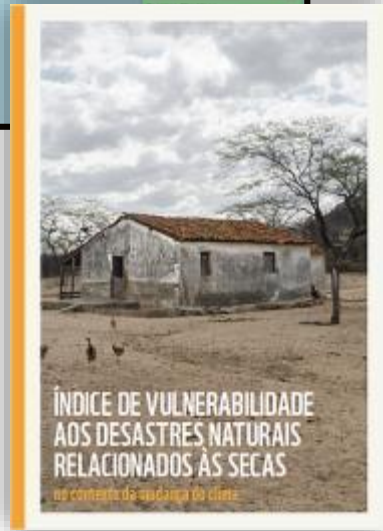
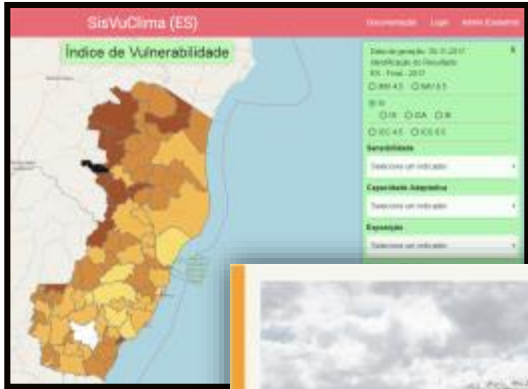


- ONLINE PLATFORM
- PUBLIC ACCESS
- ALWAYS UPDATED
- INTRODUCE TECHNICAL CAPACITY TO GOVERNAMENTAL BODIES



Examples of Adaptation Actions, DRR and SDG

New specific studies to evaluate the impacts related to floods and landslides, regarding the climate change.



Brazilian Panel on Climate Change Reports (2016/17)



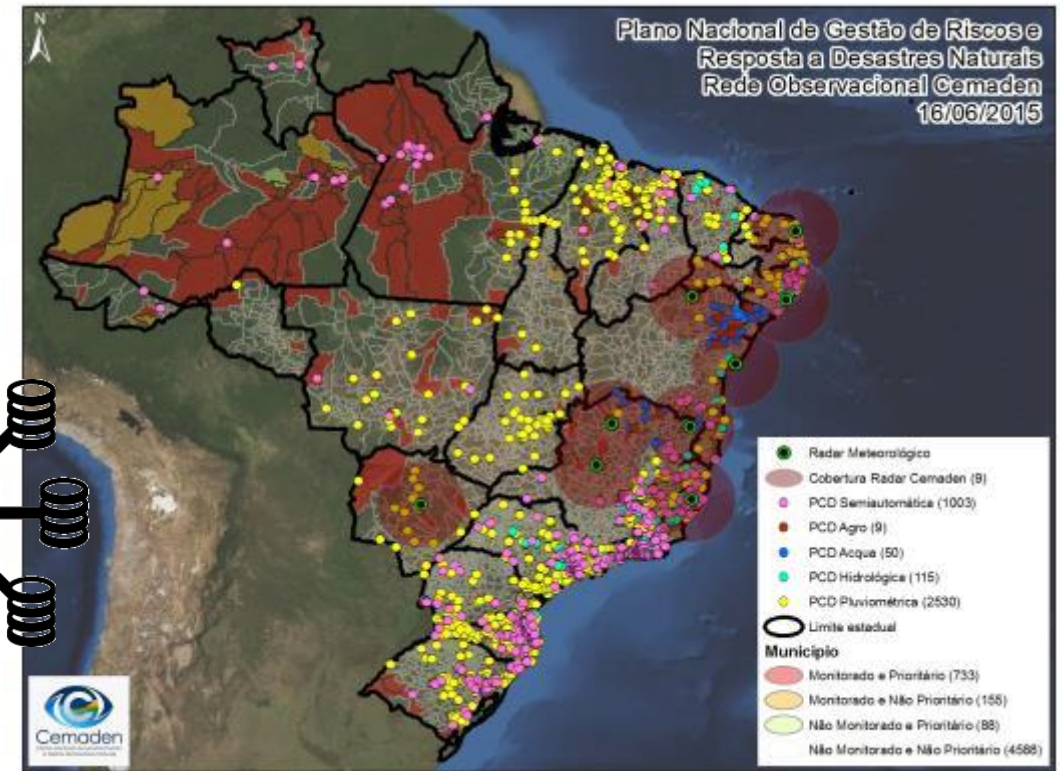
MANY IMPORTANT STUDIES ABOUT IMPACT AND VULNERABILITY TO SUPPORT THE ADAPTATION AGENDA



Examples of Adaptation Actions, DRR and SDG

Brazilian National Centre for Monitoring and Early Warning of Natural Disasters (Cemaden)

More than 4750 rain gauges, 300 fluviometers, 100 agrometeorological gauges, 9 meteorological radars, etc.
Monitoring of 958 of the most vulnerable municipalities
+8000 mapped risk areas (about 10.000.000 people)
+40 PhDs and +40 MsC



- HUGE AND IMPORTANT DATABASE OF IMPACTS AND EXTREME EVENTS
- MANY STUDIES ARE PUBLISHED EVERY YEAR
- DEVELOPMENT OF NEW TECHNOLOGIES
- SUPPORT FOR EDUCATIONAL PROJECTS

11 SUSTAINABLE CITIES AND COMMUNITIES



3 GOOD HEALTH AND WELL-BEING



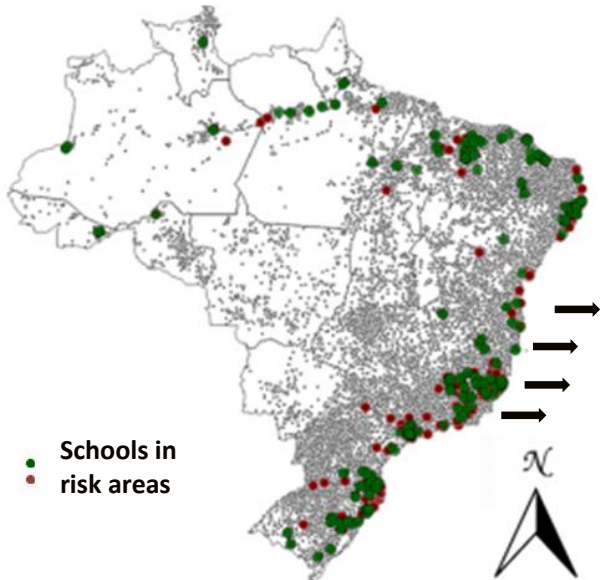


Examples of Adaptation Actions, DRR and SDG

Project *Cemaden* at Schools



APP: *Cemaden in Society* - participatory monitoring of rainfall and impacts



Risk perception enhancement



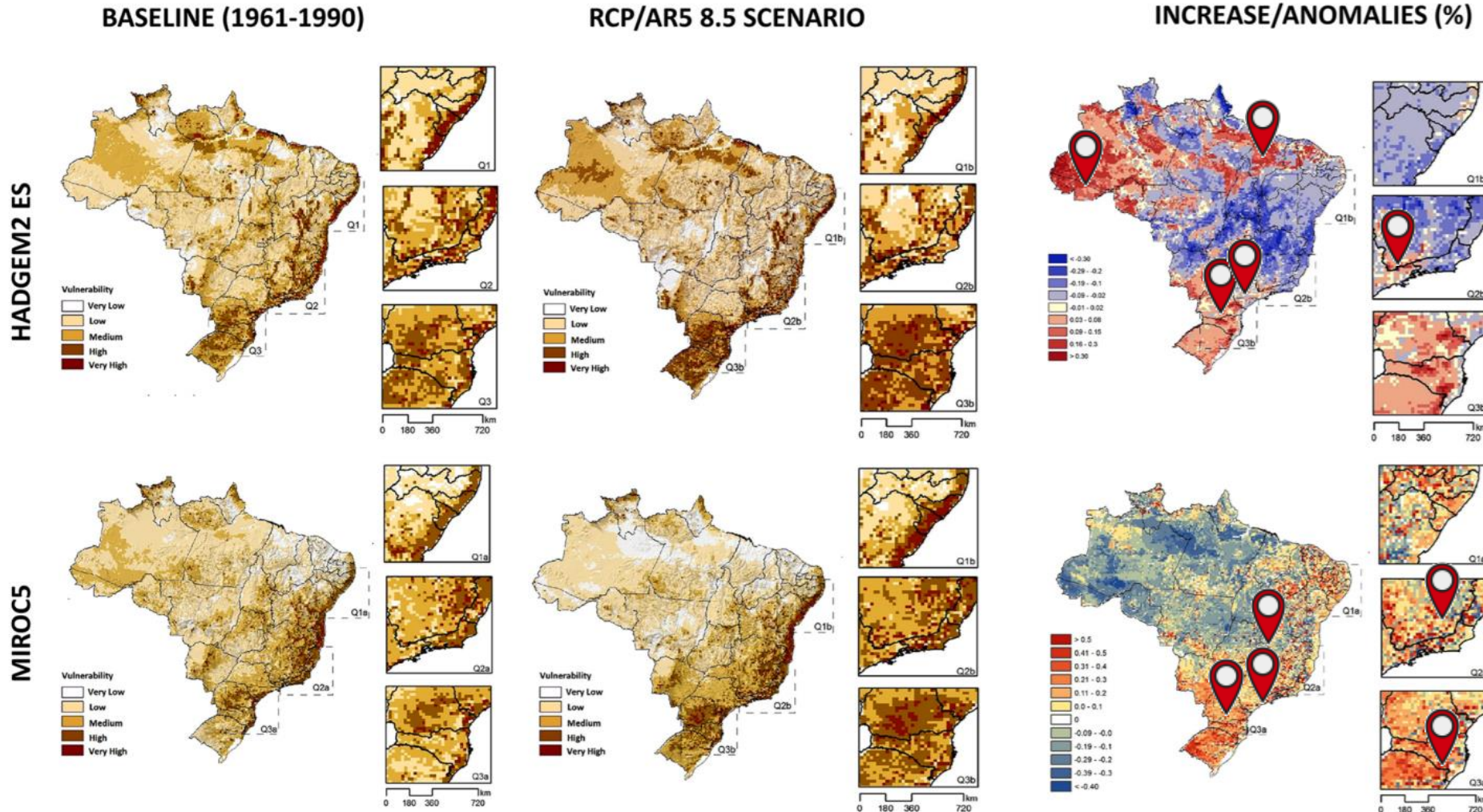
Project *Rain Gauges in Communities*





Examples of Adaptation Actions, DRR and SDG

CURRENT IMPACTS + FUTURE IMPACTS RELATED TO CLIMATE CHANGES



It was possible to find hotspots of vulnerability and, consequently, start to evaluate suitable adaptation measures (regional level)



Next step: to propose adaptation measures at local level, considering the indexes and the available database



Thank you!!
Obrigada!

Come and visit us!

Ministry of Environment
Department for Policies on Climate Change

website:

www.mma.gov.br/adaptacao

E-mail:

pedro.camarinha@cemaden.gov.br